# LUDWIG GLAUERT — MUSEUM DIRECTOR AND NATURALIST

## By D. L. SERVENTY, Nedlands

At the cnd of Dccember, 1956, Mr. L. Glaucrt retired from the directorship of the Western Australian Museum, an institution with which he was associated in a responsible capacity for the previous 47 years. This departure from public life of one who had, through his qualities and achievements, become an institution himself, profoundly stirred the natural history-minded community. The council of the Western Australian Naturalists' Club, therefore, decided to devote the present part of its journal as a valedictory and commemorative number in his honour.

The participating authors in this "Festschrift" arc drawn from that long procession of naturalists who have found inspiration and assistance at the Western Australian Museum during Mr. Glauert's long reign as head of its zoological departments. Each has specially prepared his or her contribution as a personal tribute—representative of amateurs whom he has encouraged on the road to serious zoology, university students of various generations who are indebted to him for counsel and study material, and research colleagues from Australia and beyond the seas whose stay in this country was enriched by his aid and the resources of his museum. The contributions deal with subjects in which he was interested and on which he worked, and they are offered with pride at their authors' former associations with him, and as a sad farewell.

Ludwig Glauert was born on May 5, 1879, at Sheffield, England, where his father was a manufacturer. He received his education at the Sheffield Royal Grammar School, the Technical School and the University College. Whilst a student at the college he gained a first class in part II of the honours examination in geology, and was awarded a King's Medal by the Board of Education. He was a demonstrator in geology for four years at the College and later at the University. In 1900 Dr. H. Clifton Sorby proposed him as a Fellow of the Geological Society of London and a few years later the executive of the Yorkshire Naturalists' Union appointed him a member of the Yorkshire Carboniferous Flora and Fauna Committee and of the Yorkshirc Glacial Boulder Committee. From his earliest years he made excursions to the moors, woods and beaches of Yorkshirc and endeavoured to make geology a profession as well as a hobby. However, he failed to find encouraging prospects in this field and worked for a while for his father, but soon realised that he was unfitted for a commercial earcer. Accordingly he decided to try his luck abroad. In 1908 he left Genoa for Fremantle in the Norddeutscher-Lloyd steamer Roon, taking with him the splendid geological library he had accumulated.

He was not the only member of his family who made his mark in science. A younger brother, Hermann, went to Cambridge and had a distinguished career in mathematics. He was a Smiths Prizewinner, Isaac Newton Student in Astronomy and was elected to a fellowship at Trinity College. Later he was appointed a research officer at the Royal Aireraft establishment at Farnborough and gained his F.R.S. Unhappily he lost his life in an aircraft accident. Hermann's ehildren carried on the scientifie tradition. A son is an organie chemist at Cambridge, where he is a Fellow of Trinity College, and another son is lecturer in physics at Manchester. A daughter, Audrey, is in charge of the electron microscope at the Strangeways Institute at Cambridge. Mr. Glaucrt's sister was headmistress for many years of The North Riding Girls' High School at Scarborough in Yorkshire.

## EARLY CAREER IN WESTERN AUSTRALIA— PALAEONTOLOGICAL DISCOVERIES

On his arrival in Western Australia he received a temporary appointment as field geologist with the Geological Survey, then an active department under the direction of Andrew Gibb Maitland. Through the stimulus of a rapidly developing mining industry a continuous series of geological reports flowed from the Survey Office, and Ludwig Glauert contributed two petrological and several palaeontological papers. He became keenly interested in the fossils of the State and prepared a complete list of the recorded species. One outstanding discovery of this early period was his proving that the Gingin Chalk was of Cretaeeous age.

But he very soon had more momentous discoveries to announce. In 1904 the caretaker of the Margaret River Caves (Tim Connelly) unearthed what proved to be a rich Sub-Recent bone bed in the Mammoth Cave in the Pleistocene limestone. Collections were made and eventually Glauert was invited to investigate them for the Caves Board. The remains proved to be of a most exciting character. Not only were discovered several species of the extinct marsupial and monotreme fauna, such as Nototherium, giant kangaroos, wombats, Thylacoleo and giant Echidnas, but also remains of well-known mammals of the existing Victorian and Tasmanian faunas whose former presence in Western Australia had never been suspected. They included Koala, the Tasmanian Wolf and the Tasmanian Devil. the These spectacular discoveries so impressed Sir Winthrop Hackett, chairman of the Caves Board and of the Museum Trustees, and the leading patron of science and the arts at the time, that Mr. Glauert was able to earry on the field and study work of the eaves fauna from 1909 to 1915. He transferred in 1910 from the Geological Survey to a permanent post in the Western Australian Museum, serving first as scientific assistant to the director, Bernard H. Woodward, and then, on Woodward's retirement in 1914, succeeded as keeper of geology and ethnology.

Several papers on these important caves fossils were published, mainly in the *Records of the Western Australian Museum*. A joint meeting of the Caves Board and the Museum Committee was held at the Museum on February 1, 1910, to inspect the fossils and in a lengthy report in the West Australian the following day much interesting information on the caves explorations is given. In an address to the gathering Dr. Hackett expressed appreciation of the young palaeontologist's work and stated: "It seemed as if they had got a little gold mine out of the block of limestone on which Mr. Glauert's hands had wrought such marvellous results." The public of Perth was given an opportunity of a first-hand account of the discoveries on August 12 that year when a large audience, which included the Governor, Sir Gerald Striekland, listened to Mr. Glauert speak at the Museum on the prehistorie marsupials of Western Australia. A later public lecture by him on these and later finds in the eaves drew another large attendance and a full report in the West Australian of October 1, 1914, gives useful supplementary details to the faets recorded in the scientific papers. Some reminiscences in popular vein were published many years later in an article in the University magazine, The Black Swan, in September, 1930. He gave a summary of the scientific results to date in a paper in the Western Australian Naturalist in 1948.



Fig. 2.—Mr. Glauert working on the Mammoth Cave fossils at the Museum. —"Western Mail." June 19. 1914

At the same time as these palaeontological researches he developed an interest in the Australian aborigines. He actively prosecuted his curatorial duties in the ethnological collections and though he published few scientific papers on this subject his material was quoted by others. In addition to public lectures he contributed a number of articles to the *West Australian* between 1913 and 1914, under the nom-de-plume of "Jay Penne." World War I interrupted all these activities. Mr. Glauert joined the A.I.F., and went overseas. After the Armistice he remained in Europe for some time with the Army Education, Service, being placed in eharge of the lecture service of A.I.F. depots in the United Kingdom. In the autumn of 1919 he was granted special leave to study Australian material in the British Museum (Natural History) and the Museum of the Royal College of Surgeons.

### BETWEEN THE TWO WARS-MUSEUM DIFFICULTIES

After his disembarkation leave Mr. Glauert returned to duty at the Western Australian Museum in April, 1920. A different and a wider eareer now opened up before him. His former colleague, Mr. W. B. Alexander, the keeper of the biological collections, had just resigned to take up a post as biologist to the Prickly Pear Board in Queensland (where he distinguished himself as a member of the team which eradicated prickly pear by the introduction of *Cactoblastis*). Mr. Glauert added Mr. Alexander's duties to his own and so became head of the whole of the natural history departments of the Museum. However, he was not formally declared as Curator of the Museum until December, 1927, his title until then being Keeper of the Biological Collections. In 1954 the Museum Trustees altered his title to Director of the Museum.

In his new sphere Mr. Glauert devoted himself with characteristic zeal to zoological researches, as well as expanding the museum services in the community. Before the full nature of his achievements can be appreciated it is necessary to devote some attention to the internal situation then existing in the Museum. The Museum in its present form was established in 1892 with Woodward as its eurator and governed by a board of trustees, of whom later Dr. J. S. Battye was seeretary. It was a government instrumentality but not formally a part of the eivil service. So the staff did not have any pension privileges and there was no retiring age. This accounted for Dr. Battye's achieving what must be a record in government service: he became public librarian and secretary to the trustees in 1894 and held those posts until his death in 1954, thus being head of his department for elose on 60 years! In the early days of the Museum, with Woodward as its powerful curator and the enlightened Winthrop Hackett as president of the trustees, a vigorous programme of Muscum activity was earried out. Collecting expeditions were almost constantly in the field, and the foundations of the splendid study collections of mammals and birds were laid down in those years (1895-1906). The retirement of the principal collector (J. T. Tunney) and later financial stringeney eaused a suspension of active field work until the present day.

In the period between the two World Wars, when Mr. Glauert resumed Museum activity, with Woodward and Hackett both dead, he found a rather less congenial atmosphere among his superiors. Dr. Battye through long years of authority had grown in power, and subscribed to the view that the Museum could adequately subsist on easual donations of specimens from the general public or what the eurator eould eolleet himself in his spare time within inexpensive travelling distance of the metropolitan area. Thus for the financial year 1928-29, just before the financial depression. apart from salaries and wages, the Library spent £1,206 on the purehase of books, the Museum £30 on its various biological activities, and the Art Gallery  $\pounds 1/11/6$ , but the latter fortunately had a private fund in the Haekett Bequest and was able to spend £58 on pietures that year. In the depression year 1930-31 the biology spending dropped to £19/19/5, but at its best was never generous. During World War II, in 1941-42, it dropped even lower than in the depression, to £13/3/9. The attitude of Dr. Battye to expenditure on field work and the acquisition of speeimens was vividly brought home to me by an aneedote related by the late taxidermist, Otto Lipfert. The swamps north of Perth and extending to Wanneroo attract many water birds and several species rare to the South-West were eolleeted there from time to time by wildfowlers, who used to sell their specimens to the Museum. One of the most successful and discerning of these was the late Tom Ostle. At one period, when the second or third specimen from Ostle eame in quick succession to the Museum, and for which he received the princely sum of 1/- or 2/6 each, Dr. Battye protested: "The fellow is making a business of it!"

A less resolute eurator might well have sueeumbed in this environment to being a mere institutional haek, but those who recollect Mr. Glauert's strong personality and vigour in those days remember how firmly he battled to maintain the interests and welfare of his museum. He had to bow, of eourse, to the erippling restrictions on collecting and extensive field work, but within the limits allowed him he achieved marvellous suecess.

He was able to accept two invitations for extensive visits to the North-West. In the late autumn of 1922 he visited Milly Milly Station in the Murchison district as the guest of Mr. D. Muleahy. In 1928 he spent some six weeks at Mt. James and Landor Stations, on the Gaseoyne, as the guest of Captain A. R. E. Russell, manager of Landor and part-owner of Mt. James, On both visits notable discoveries were made. Otherwise he was compelled of necessity to operate in the environs of the metropolitan area, and here he was a zealous collector. Mr. Alexander had shown how productive it was to search the local beaches after winter gales for storm-drifted sea-birds and Mr. Glauert enriched the Museum eoflections extensively in this manner by personal beacheombing between Leighton and Swanbourne. He was seized with the importance of a thorough zoological survey of Rottnest Island and made repeated visits there, for which work he was awarded a grant from the Seienee & Industry Endowment Fund in December, 1929. He also collected on the swamps of the Swan Coastal Plain and in the Darling Ranges, all of which yielded important diseoveries and provided material for research papers.

Field workers at the present time, well provided with motor vehicles, sometimes wonder at the comparatively sedentary habits of the field naturalists of the 20s and 30s. But roads were indifferent then and long trips arduous. The road journey to Albany, for instance, was a two-day ordeal, and the motorist was thankful to reach Williams for the first night's stop-over. Few naturalists had the use of cars, and neither the Museum nor the University zoology and geology departments possessed any officially. Places that could not be cheaply travelled to by train were usually quite out of reach. The professor of zoology in the 20s accompanied various friends on country motor trips to conduct his faunal surveys and gratefully dedicated some of his new species to these benefactors.

Mr. Glauert was, on the whole, the sole collector for his museum. When the material came to the institution he had the assistance for many years of only one staff member—the taxidermist. He had to maintain his own registers, write his own labels and attend personally to many of the routine euratorial chores. In 1929 Mr. C. F. H. Jenkins joined the Museum staff as a cadet and shared some of the scientific load but in 1933 he resigned to take on the appointment of Assistant Entomologist at the Department of Agriculture. Later Mr. A. M. Douglas joined the staff as a junior assistant.

Despite these internal and external difficulties and impediments Mr. Glauert accomplished a surprising amount of original scientific work, rearranged the exhibition galleries to maintain a continuously modern effect, and in his relations with the public and scientific societies built up a great measure of goodwill to the Museum and the eause of natural history. To this eause he devoted some of his private means. One example. Always a keen bibliophile he continued the purchase of books on zoology not possessed by the institution, and the bulk of these were presented by him to the Museum in 1952. This valuable gift contained rare items not now obtainable except at great cost.

The beginning of a new era dawned for him in 1936 when an outside organization eame to the aid of the Museum. In May of that year Mr. Glauert attended the first interstate conference of museum directors under the auspices of the Carnegie Corporation of New York. Large grants were made for increasing the museum's services and for the purchase of equipment, and the eurator was able to make his first overseas tour since he resumed office in 1920. World War II, however, checked the promising developments then started. Later, with the passing of Dr. Battye and the formation of a museum sub-committee of the Trustees, at the instigation of the present President, Mr. Justice Wolff, progress was resumed with a liberalisation of funds—but the reforms eame too late to benefit him personally.

## RESEARCHES IN ZOOLOGY

The return to the Museum after World War I and the assumption of zoological responsibilities led to a re-orientation of his research interests. Though he did not altogether vacate the rich field of palaeontological discovery he had begun to exploit before the war, he did eomparatively little further work on the eave fossils. No one else did either for a long period. With the exception of some exploratory work by Dr. D. S. Davidson, of the University of Pennsylvania, in 1940, the eaves investigation was not resumed until 1954 when another American, Dr. E. Lundelius, arrived here on a Fulbright Fellowship to apply modern techniques to the study. A first report on his discoveries appears in this number.

Glauert the palaeontologist now became Glauert the zoologist. And he made his name anew in several fields. First, ornithology. He had already in 1915 contributed a chapter on birds in Dr. Battye's book on the North-West, but after the war he maintained a continued interest in the subject. His marine beachcombing for pelagic birds added several important records. His outstanding achievement was the describing in 1930 (jointly with Mr. Jenkins) of the breeding habits of the Banded Stilt (Cladorhynchus leucocephalus). This had been a mystery for over a century.

In work on the recent mammals he did little of an original nature but became very knowledgeable on their general natural history and distribution. Among the reptiles he collected actively and did considerable taxonomic work, preparing a general handbook on the snakes of Western Australia in 1950, a second edition of which is now in the press. He brought to light two "new" species of fresh-water tortoises. One of these was the fresh-water tortoise of the North-West rivers, from the Murchison to the De Grey, which he collected at Milly Milly Station in 1922, but his description was published after Siebenroek's in Vienna and so missed priority. He had a somewhat similar experience with the "new" species of short-necked tortoise he described in 1954 from the Bullsbrook district. Actually both discoveries were entirely new to Australian zoologists.

Among the invertebrates he investigated several groups. He became an authority on the Australian seorpions, describing several species and working out collections from various parts. He was interested in several groups of crustacea and in 1923 announced the description of a species of fresh-water isopod, Phreutoicus palustris, from the Perth area. It belonged to a remarkable sub-order, diseovered originally by Charles Chilton in New Zealand, and the group remained virtually Chilton's preserve over the years until Glauert's identification of the Perth species. The creature proved to be extremely plentiful in local swamps and how it eluded discovery for so long, despite much limnological work in the area by the Hamburg Expedition of 1905, by Professor W. J. Dakin and others is rather astonishing. Mr. Glauert's discovery fired the interest of the late Professor G. E. Nieholls in the group and he made it a major project of his life henceforth. Mr. Glauert also discovered the only colony on the mainland of the west coast of the interesting shore isopod, Deto marina (at Freshwater Bay), and uncovered during his restless probing of various habitats other notable local occurrences of new animals to the faunal list of the Swan Coastal Plain.

He was an assiduous collector in many invertebrate groups in which he did not himself do taxonomie work, but endeavoured to interest other systematists. He was unwearying in his efforts to induce Australian and overscas specialists to work up littleknown groups and was ever ready to send collections for study in any part of the world. The list at the end of this paper, of new forms named after him, is some indication of the range of this activity.

In further pursuance of his endeavours to have the fauna of the State adequately surveyed and documented he welcomed interstate and overseas zoologists on visits to the State, to make the Museum their headquarters and utilise its collections.

#### THE MUSEUM AND THE PUBLIC

Mr. Glauert did not allow his curatorial dutics and museum researches to absorb the whole of his energics. He moulded the Museum to serve the public in several ways.

Other government departments, members of the lay public and general naturalists were given help and information on natural history problems which were referred to him and which he felt qualified to answer. He threw himself forcefully into publie controversies where natural history matters were at issue. He was a staunch advocate of conservation, an opponent of indiscriminate animal acclimatisation, and an indefatigable exposer of what he considered to be popular fallacies and prejudices. Thus he never hesitated to enter the lists on behalf of the Swan River cormorants in the perennial arguments which arose as to whether these birds preyed on commercial fish. Until recent years the West Australian newspaper published a considerable amount of local news of what might be called cultural character and Mr. Glauert became a household name to the public through the frequent items of zoological news he sponsored. He wrote popular articles on the State's fauna to a variety ef journals. Between 1928 and 1930 he contributed a weekly scrics, entitled "The Naturalist" to the Western Mail, the State's leading weekly at the time and conducted on journalistic standards which seem to have now gone out of fashion. Between 1926 and 1930 he also wrote oceasional illustrated articles to the Westralian Farmers' Gazette, mainly on manimals and reptiles and containing much original information. For the Education Department he contributed for many years to Our Rural Magazine a lengthy series of articles, including an "Answers to Correspondents" section for country school children. He early took advantage of the new publicity medium afforded by wireless and gave frequent broadcasts through both the national and commercial stations.

He induced the Education Department to begin, in 1935, what was then an innovation in Australia, the establishment of Museum classes under the charge of qualified science masters. These, after a hiatus in the late war and early post-war period, have provided opportunities for most children educated in the metropolitan area to gain an insight into natural history.

There has been in my experience no one quite like him as a "eatalyst," as it were, in engendering active interests in natural history in the community. He had a sanguine temperament, with a bold optimistic attitude to life, an essential attribute of a community leader. Too many men occupying similar posts to his, good selentists but with a defeatist or pessimistic outlook, fail to realise their full potentialities and never make their mark in



Fig. 3.—A cartoon by Clive Gordon in the "Western Mail," July 3, 1930.

leadership. I myself must pay tribute to Mr. Glauert for his early guidanee of my own path in natural history. He first encountered me, after school one afternoon, at the Public Library when I was making extracts from the keys in Lueas & Le Souef's *Birds of Australia* (those wcrc, of course, the days of open access at the library). An invitation to eall on his room in the Museum followed and I received a personally conducted tour through the bird gallery with suggestions of what to observe and how to keep a natural history diary. From that day on the Museum and its two active naturalists, Glauert in his study at the end of the long corridor (how familiar it became!), and Lipfert in his little back room bchind the old colonial gaol gateway, became the Meeea for a developing naturalist over the years. Subsequent experiences at the University and other institutions never dimmed for me recollections of the pleasure and stimulation I gained in

those early years. My history was by no means unique. Many zoologists now occupying responsible posts here and abroad remember gratefully and with affection their mentor at the Museum. Not all inquirers for knowledge received benevolent attention, however. Mr. Glauert had positive ideas on what studies were to be encouraged and what not and no one was left with any ambiguity as to his feelings and opinions on the matter. He had, for instance, no patience whatsoever with egg-collecting in any He was searcely being fair to serious oologists, for in form. Australia much worthwhile data on breeding seasons and breeding periodicity have accrued from their careful nest records. though it must be confessed that many egg-collectors have failed dismally in adequately capitalising their opportunities. Anyway, no egg-collectors were kindly received at the Museum and no eggs were placed on public exhibition.

University students were given encouragement and suggestions for research, and many naturally turned to the Museum for counsel. One young woman of my acquaintance called on him for advice as to what group of animals, "that was monographed in English," she could take up for an honours degree! However, he was not averse to helping a struggling student, who had difficulties with a German text, in translating lengthy passages.

During the 20s and early 30s it was the practice for first year geology students at the University and the Perth Technical College to participate in a joint Easter eamp at Gingin, under the leadership of Mr. Glauert (for palaeontology) and Mr. G. Speneer Compton (general geology). The eamp was looked forward to very eagerly, and through the infectious enthusiasm of the two leaders a great time would be had by all, as the saying goes. At nights specimens collected during the day would be identified and diseussed and the more desirable would be retained for the national collections, often to the chagrin of the finders. One humourist among them penned the following lament in the University magazine, *The Black Swan* (June, 1927):

> Then adjourned they to the Hotel. Fillet fish and mustard sauce Oh! Then friend Glauert sorted fossils Some he fancied and he borrowed For his mouldy old Museum. He assured us that his trustees Spake by him their gratitude. Thus our hardly won collections Fruits of hours of weary searching Musk's and Ginginup and Moorgup. Vanished in his ample maw, Vanished and were seen no more.

For the lay public Mr. Glauert maintained the exhibition galleries in as modern a state as the slender financial resources of the institution allowed him. He was not able to visit overseas eountries, since his return from World War I as mentioned earlier, until 1938, when he received a Carnegie Corporation Grant for the purpose. He went to Europe again, on long service leave. at his own expense, in 1953. These visits, combined with reading of achievements abroad, provided ideas for modern display techniques. He prevailed on his friend the curator of the Art Gallery (Mr. G. Pitt Morison) to paint backgrounds for him and attempt other art work—and rearranged exhibits for greater educational effect with the minimum of official expenditure.

## ASSOCIATION WITH SCIENTIFIC BODIES

Naturally the head of the museum would play a prominent part in the city's organised scientific life. At the time he arrived in the State the only scientific society existing was the Natural History and Science Society of Western Australia, which developed out of the older Mueller Botanie Society and itself later (in 1913) was transformed into the Royal Society of Western Australia. Mr. Glauert served as secretary for the year 1908-09 and was elected to the council for 1911-12 for one term. On his return from the war he joined the Royal Society, and the following year was elected to the council, serving in various capacities continuously for many years. As the society's library was housed at the Museum in those days it was convenient for him to act as librarian or assistant librarian so that members could obtain books at any time. He enjoyed the distinction of being twice president of this society, for 1933-34 and again for 1947-48. In 1945 he was awarded the gold medal of the society for distinguished work in science in Western Australia; this award is made only once every four years.

He took a prominent part in the moves for the formation of the Western Australian Naturalists' Club and was one of the 15



Fig. 4.—The ornithologist Gregory Mathews and L. Glauert, Perth Railway Station, September 7, 1940.

foundation members of the Club at its inaugural meeting on July 3, 1924 (only six of these now survive). He was elected to the first eouncil, and became president for the year 1929-30. He was treasurer in 1930-31. In 1946 he was made an honorary member and became patron of the Club in 1951.

It is interesting to recall that at one of the earliest meetings of the Club, on August 29, 1924, Mr. Glauert proposed that it devote its revenue to publishing handbooks on the different branches of natural history relating to the State. This was a long-felt want, he stated, and would give an impetus to the study of natural history. It took 26 years before the suggestion could be implemented, and appropriately, the first handbook published, in 1950, was his own on the snakes of Western Australia. Publication of such handbooks is now a major activity of the Club.

His frequent addresses to the Club were always weighty and full of interest. Thus on February 27, 1925, he was probably the first zoologist in Australia to introduce the Wegener theory to the public when he spoke on the faunal history of Australia. The topic excited popular interest and received a long report in the *West Australian*. His presidential address to the Club on October 31, 1930, on "Museums and Their Uses" epitomised his own activitics well. They were: to instruct and inspire the amateur; to build up a store of research material for the professional biologist; and to educate and hold the interest of the general public. A full report of the address appeared in the *Daily News* of November 8, 1930, and an abstract was published in the Club's old eircular series, No. 55.

Among his many services to the Club was the donation, at frequent intervals, of natural history volumes to the Club's library.

In 1948 he was awarded the Australian Natural History Medallion, having been nominated by both the Royal Society and the Naturalists' Club for this all-Australian honour. The medal was conferred on him at a special meeting of both bodies at the Assembly Hall, Perth, on May 25, 1949. He was one of the very few biologists outside of New South Wales to be elected to the Fellowship of the Royal Zoological Society of New South Wales. A signal honour was paid him in February this year when the Senekenberg Natural History Society (Senckenbergische Naturforschende Gesellschaft), of Frankfurt a.M., West Germany, elected him a corresponding member.

Outside of scientific circles Mr. Glauert has taken a prominent part in the work of the Legacy Club and has served as its president.

#### ENVOI

Mr. Glauert's direction of the Museum is now over. However, he will not sever his connection entirely with the institution and the interests to which he gave so devoted service. The Trustees have provided him with study accommodation at the Museum where he will be able to continue his natural history work without the distractions of curatorial dutics and general administration. All his friends devoutly hope hc will be spared a long time to enjoy this well-earned retirement from official care.

## NEW ANIMALS NAMED AFTER MR. GLAUERT

The following is a list of new genera, species and subspecies dedicated to Mr. Glauert by their authors:

Mammals: Rattus glauerti Oldfield Thomas, 1926.

Birds: Onychoprion fusea glauerti Mathews, 1922. Alphapuffinus assimilis glauerti Mathews, 1937. Meliphaga vireseens glauerti Mathews, 1943.

Reptiles: Aprasia striolata glauerti Parker, 1956. Varanus timorensis glauerti Mertens, 1957.

Amphibia: Glauertia Loveridge, 1933. Crinia glauerti Lovcridge, 1933.

Fishes: Phycodurus glauerti Whitley, 1939. Echinophrync glauerti Whitley, 1944. Glauertichthys Whitley, 1945. Antennarius glauerti Whitley, 1957.

Ascidians: Leptoclinides glauerti Michaelsen, 1930.

Mollusca: Solitosepia glauerti Cotton, 1929. Lepidopleurus glauerti Ashby, 1929. Bothriembryon glauerti Iredalc, 1939. Coxiella glauerti Macpherson, 1957.

Arachnida: Bindoona glauerti Roewer, 1929. Belaustium glauerti Womersley, 1934. Dingupa glauerti Forster, 1952.

Insects: Oligotoma glauerti Tillyard, 1923. Lithomyrmex glauerti Clark, 1928. Calomyrmex glauerti Clark, 1930. Corohenes glauerti McKcown, 1930. Stenotritus glauerti Rayment, 1930. Halictus glauerti Rayment, 1931. Neachorutes glauerti Womersley, 1933. Turnerella glauerti Rayment, 1934. Metajapyx glauerti Womersley, 1934. Dolichoderus glauerti Wheeler, 1934. Glauertia Rothschild, 1936 (preoce. and renamed Glauertidos Rothschild, 1937). Anthela glauerti Turner, 1939. Tricophthalma glauerti Paramonov, 1953. Oxycanus glauerti Tindale, 1955. Tachysphex glauerti Rayment, 1956.

Crustacea: Scalpellum glauerti Withers, 1927\*. Haswellia glauerti Baker, 1928. Stenetrium glauerti Nicholls, 1929.

Sponges: Ecionema glauerti Chapman and Crespin, 1934\*. Neosiphonia glauerti Chapman and Crespin, 1934\*.

\* Fossil species.

## LIST OF SCIENTIFIC PUBLICATIONS BY L. GLAUERT

#### 1906

Red Rock of Rotherham. The Naturalist (Leeds), no. 588, January 1: 5.

#### 1908

Erratie Blocks of the British Isles . . . (Report). Rept. 77th meet. Brit. Assn. Adv. Sci., 1907: 331.

### 1909

Description of the crystalline rocks of the Phillips River District. In Geological Report upon the gold and eopper deposit of

the Phillips River goldfields, by H. P. Woodward. Bull. Geol. Surv. W. Austr., 35: 21-47 [with E. S. Simpson].

A New Species of Sthenurus. Quart. Journ. Geol. Soc., London, 65: 462 [Abstract].

#### 1910

The Mammoth Cave. Rcc. W. Autr. Mus., 1 (1): 11-36.

Sthenurus occidentalis (Glauert). Bull. Geol. Surv. W. Austr., 36: 53-64.

A List of Western Australian Fossils (systematically arranged). Bull. Geol. Surv. W. Austr., 36: 71-106.

Western Australian Fossil Plants. Bull. Geol. Surv. W. Austr., 36: 107-110.

New Fossils from the Napier Range, Kimberley. Bull. Gcol. Surv. W. Austr., 36: 111-114.

The Geological Age and the Organic Remains of the Gingin "Chalk." Bull. Geol. Surv. W. Austr., 36: 115-127.

## 1911

Petrological Notes. In The Geology and Ore Deposits of the West Pilbara Goldfields, by H. P. Woodward. Bull. Geol. Surv. W. Austr., 41: 26-45.

## 1912

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